UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,814	10/01/2001	J. Mitchell Shnier		3986

7590 01/13/2005	

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EXAMINER
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ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/965,814	SHNIER, J. MITCHELL
	Examiner	**Art Unit**	
	Greg Bengzon	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>October 1 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>01 October 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

This application has been examined. Claims 1-22 are pending.

Priority

The effective date of the subject matter described in the claims of this application

is October 1, 2001.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on October 1, 2001 was

filed after the mailing date of the application on October 1, 2001. The submission is in

compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure

statement is being considered by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 6,7,15, 16, 20, 21, and 22 are rejected under 35 U.S.C. 112, first

paragraph, as failing to comply with the written description requirement. The claim(s)

contains subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to Claim 1, the applicant cites a method 'whereby storage requirements are reduced, and the need to update said storage whenever an additional reference in said sequence of references becomes available is eliminated'. The applicant's specifications do not sufficiently disclose how these limitations are achieved by the invention.

With respect to Claim 2, the applicant cites 'said information'. The applicant's claim language is vague and ambiguous. Applicant's specifications do not sufficiently disclose what is meant by said phrase.

With respect to Claim 6, the applicant cites 'wherein said record is sent from content provider directly to user'. The applicant's claim language is vague and ambiguous. Applicant's specifications do not sufficiently disclose what is meant by said phrase.

With respect to Claim 7, the applicant cites ' further storing information of when said information which is periodically updated is updated.' The applicant's claim language is vague and ambiguous. Applicant's specifications do not sufficiently disclose what is meant by said phrase.

With respect to Claim 15, the applicant cites a phrase 'whether references have already been used'. The applicant's claim language is vague and ambiguous. Applicant's specifications do not sufficiently disclose what is meant by said phrase.

With respect to Claim 16, the applicant cites phrases 'even from a different listening location' and 'said predetermined number of seconds of information'. The applicant's claim language is vague and ambiguous. Applicant's specifications do not sufficiently disclose what is meant by said phrase.

With respect to Claim 20, the applicant cites phrase 'said information is used as it is received'. The applicant's claim language is vague and ambiguous. Applicant's specifications do not sufficiently disclose what is meant by said phrase.

With respect to Claim 21, the applicant cites method whereby 'error-free and non-real-time transmission can be used to both improve the quality of the received information, and accommodate slower networks'. The applicant's specifications do not sufficiently disclose how these limitations are achieved by the invention.

With respect to Claim 22, the applicant cites method whereby the transmission bandwidth can be simultaneously shared by many users, thereby reducing network traffic. The applicant's claim language is vague and ambiguous. Applicant's

specifications do not sufficiently disclose what is meant by said phrase. The applicant's specifications do not sufficiently disclose how these features are achieved by the invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-7, 12,13,15, 17-22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Eyal (US Patent 6389467), in view of Terek et al. (US Patent

6804700), hereinafter referred to as Terek.

With respect to Claim 1, Eyal discloses a method of representing a sequence of

references to information available on a communications network, said sequence of

references changing in some predictable pattern, (Figures 2-3, 7-9,19, Column 5 Lines

5-35, Column 23 Lines 1-65, Column 32 Lines 40-65) said method comprising the

steps of: a) locating examples of said sequence of references, where each reference

consists of a non-changing part, which is at least some of the characters of said

reference which are the same for all references in said sequence of references,

(Column 23 Lines 1-20) c) creating a database record(s) , said record(s) comprising at

least; said non-changing part, and one or more fields of information selected to indicate

said predictable pattern, d) storing said record(s) , (Column 23 Lines 10-15, Figure 2

Item 245))e) utilizing said record(s) to later reconstruct any reference of said sequence

of references, the specific reference reconstructed being specified according to a

supplied index value, (Column 23 Lines 45-50) whereby storage requirements are

reduced, and the need to update said storage whenever an additional reference in said

sequence of references becomes available is eliminated, and whereby any desired

reference can be easily specified through said index value. (Column 24 Lines 60-65)

With respect to Claim 2, Eyal discloses the method of claim 1 wherein said

information is stored at a content provider, and a plurality of said record(s) are stored at

a third-party database. (Figure 2 Item 220, Column 13 Lines 40-45, Column 14 Lines

20-30)

With respect to Claim 3, Eyal discloses the method of claim 1 wherein said

information is stored at a content provider, and said record(s) is also available from said

content provider. (Column 14 Lines 50-65, Column 15 Lines 1-20)

With respect to Claim 5, Eyal discloses the method of claim 1 wherein said index

value is used to generate references to newly-created information. (Column 23 Lines

55-60)

With respect to Claim 6, Eyal discloses the method of claim 1 wherein said

record is sent from content provider directly to user. (Figure 4, Column 19 Lines 30-40,

Column 20 Lines 25-35, Column 31 Lines 65)

With respect to Claim 7, Eyal discloses the method of claim 1 further storing

information of when said information which is periodically updated is updated. (Column

23 Lines 45-52)

With respect to Claim 12, Eyal discloses a method of representing a series of

references to information available on a communications network, (Figure 2-3, Figure

19Column 5 Lines 5-35, Column 23 Lines 1-65) comprising the steps of: a) locating all

references in said series of references, b) building a table of said references,

associating with each entry in said table an index value, (Column 22 Lines 1-20,

Column 23 Lines 15-20) c) storing said table, d) utilizing said table to later return any

reference of said series of references, the specific reference returned being specified

according to said index value, whereby any reference can be easily specified through

said index value. (Column 23 Lines 40-45, Column 24 Lines 60-65, Column 27 Lines

65, Column 28 Lines 1-10)

With respect to Claim 13, Eyal discloses the method of claim 12 wherein the

said series of references is periodically examined to determine whether any new

references have been added to said series of references. (Column 23 Lines 15-20)

With respect to Claim 15, Eyal discloses the methods of claims 1 or 12 wherein

a record is maintained of references and the time and date used, said record being

used to determine whether references have already been used, whereby users can

have the choice of not again receiving information which they have previously received.

(Figure 9, Column 25 Lines 20-65, Column 10 Lines 1-20, Column 24 Lines 60-65,

Column 26 Lines 5-20)

With respect to Claim 17, Eyal discloses the methods of claims 1 or 12 wherein

said information is streaming audio. (Column 29 Lines 15)

With respect to Claim 18, Eyal discloses the methods of claims 1 or 12 wherein

said network is the public Internet. (Figure 2 Item 220)

With respect to Claim 19, Eyal discloses the methods of claims 1 or 12 wherein

said references are uniform resource locators. (Column 29 Lines 20)

With respect to Claim 20, Eyal discloses the methods of claims 1 or 12 wherein

said information is used as it is received. (Column 27 Lines 1-45, Column 28 Lines 35-

40, Column 28 Lines 50-60)

With respect to Claim 21, Eyal discloses the methods of claims 1 or 12 wherein

said information is stored as it is received, available to be used at a later time, whereby

error-free and non-real-time transmission can be used to both improve the quality of the

received information, and accommodate slower networks. (Column 27 Lines 1-45,

Column 28 Lines 35-40, Column 28 Lines 50-60)

With respect to Claim 22, Eyal discloses the methods of claims 1 or 12 wherein said information is simultaneously received by a plurality of users, whereby the transmission bandwidth can be simultaneously shared by many users, thereby reducing network traffic. (Column 33 Lx 20-50, Column 4 Lx 45-55)

However Eyal does not disclose the method of Claim 1 where each reference, in addition to the non-changing part, also has a changing part, which is the remaining characters of said reference, said changing part resulting in each reference of said sequence of references being unique. Eyal does not disclose b) examining said changing part to determine said predictable pattern, and c) creating a template, said template comprising at least; said non-changing part, and one or more replacement indicators selected to both indicate said predictable pattern, as well as the position in said reference where said predictable pattern occurs.

Terek discloses of a method for generating and assigning human-readable and unique URLs to objects. Terek discloses of generating and incorporating the human readable descriptive portion of the object into a unique URL for the said object, while maintaining a hash index in order keep track of previously modified object URLs. The generated URLs consist of a static portion followed by a non-static portion which can be used to form a template for a sequence of related URLs. (Figures 2-4 , Column 7 Lines 35-65, Column 8 Lines 50-60, Column 9 Lines 30-65) Terek discloses of a postfix

which is associated with the hash value, said postfix being appended to the newly

generated URL to make said URL unique. The postfix is modified in such a way that

makes it distinguishable from previously used postfixes in previously existing URLs. The

Examiner notes that the postfix is similar to the replacement indicators described by the

applicant, as the postfix may be used to represent an updated URL. (Column 2 Lines 1-

25 , Lines 35-65)

Eyal and Terek are analogous art because they both present concepts and

practices regarding identification, manipulation, and presention of a sequence of

references to information on the network, for the purpose of allowing users to access

the said information. It is respectfully suggested that at the time of the invention it would

have been obvious to a person of ordinary skill in the art to incorporate the teachings of

Terek regarding generating human readable 'meaningful descriptions', unique

identifiers, tokens, postfixes, hash index values and appending said unique identifiers to

the newly created URL or pre-existing URLs, into the method of Eyal . The suggested

motivation for doing so would be , as Terek suggests, so that users do not have to

open the object to determine the relevance of the object, thus wasting user time. The

method suggested by Terek conveniently allows for generating unique URLs for both

new and pre-existing URLs. (Column 1 Lines 55-65)

Therefore it would have been obvious to combine the teachings of Terek into

the methods of Eyal in order to obtain the invention as described in Claims 1-3, 5-7,

12,13,15, 17-22.

Claims 4, 8-11, 14, 16 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Eyal (US Patent 6389467), in view of Terek et al. (US Patent

6804700), hereinafter referred to as Terek, further in view of Geagan et al. (US Patent

6263371), hereinafter referred to as Geagan.

With respect to Claim 4, the combined teachings of Eyal and Terek   disclose the

method of claim 1 wherein said replacement indicators produce output selected from

the group consisting of unique identifiers, such as a h) count value, relative to a

specified starting number, and with or without leading zeros, as specified when

selected;(See Terek Column 9 Lines 40-45) where the said identifiers are relative to

either a specified date or to the date when said template is used to generate an updated

reference, as specified when said template is created, whereby templates can be

created which contain any combination of date and count components, along with non-

changing characters, whereby said templates can be used to generate references to

information which is periodically updated. (See Eyal Figures 2-3, 7-9,19, Column 5

Lines 5-35, Column 23 Lines 1-65; See Terek   Figure 2, 4 , Column 7 Lines 35-65,

Column 8 Lines 50-60, Column 9 Lines 30-65) The Examiner highlights Terek 's

statement that says - 'Methods for modifying a value so that it always unique when compared to previous values, including numerically incrementing the value each time it is used, are well known in the art.'

With respect to Claims 8-12, , the combined teachings of Eyal and Terek disclose the methods of claims 1 wherein an index value is used to locate a particular sequence of references. (See Eyal Column 23 Lines 45; See Terek Figure 4, Column 8 Lines 45-60)

With respect to Claim 16, the combined teachings of Eyal and Terek disclose the methods of claims 1 or 12 wherein a record is maintained of the amount of information received, such that if information reception is interrupted it can later resumed, even from a different listening location. (See Eyal Column 28 Lines 1-15, Column 32 Lines 15-20)

However the combined teachings of Eyal and Terek do not disclose the method of Claim 1 wherein said replacement indicators produce output selected from the group consisting of the: a) date, with or without a leading zeros for single-digit dates, as specified when selected b) month number, with or without a leading zero, for single-digit months, as specified when selected c) three-letter abbreviation for the month, all lower-case, with only the initial letter capitalized, or all capitalized, as specified when selected d) full month name, all lower-case, with only the initial letter capitalized, or all

capitalized, as specified when selected e) week number, with or without a leading zero,

for single-digit weeks, as specified when selected f) four-digit year g) least-significant

two digits of the year. The Examiner notes that all of the above indicators are

commonly used, in various combinations and formats, for generating timestamps, and

therefore the said indicators are treated uniformly as timestamp values. The use of

timestamps, in various combinations and formats, to provide unique incremental values

is well known in the art.

    With respect to Claim 8, the combined teachings of Eyal and Terek   do not

disclose the method of claim 1 wherein said index value is a numerical offset relative to

the current date. With respect to Claim 9, the combined teachings of Eyal and Terek

do not disclose the method of claim 1 wherein said index value is a numerical offset

relative to a specified absolute date. With respect to Claim 10, the combined teachings

of Eyal and Terek   do not disclose the method of claims 8 or 9 wherein an increment

value is specified to indicate the interval between updates. With respect to Claim 11, the

combined teachings of Eyal and Terek   do not disclose the method of claim 10 wherein

a previous or subsequent reference is generated from said template by multiplying an

offset times said increment value and adding base date or count value used for the

calculation of the reference. With respect to Claim 14, the combined teachings of Eyal

and Terek   do not disclose the methods of claims 1 or,12 wherein said index value is a

numerical offset used to specify the particular reference desired. The Examiner notes

that all of the above claims are referring to an index value indicating an offset relative to

a singular reference point.

With respect to Claim 16, the combined teachings of Eyal and Terek do not

disclose the methods of claims 1 or 12 wherein a record is maintained of the amount of

information received, such that if information reception is interrupted it can later

resumed, even from a different listening location, optionally a predetermined number of

seconds earlier, whereby a user can control when they complete receiving information

and the last said predetermined number of seconds of information can be repeated to

aid in recalling where the information was interrupted.

Geagan discloses of a method and apparatus for filling in information gaps in

data streams, as applied to streaming content delivered via the Internet. Geagan

discloses that missing information may be derived from the other data streams received

from the content source, and the said derivation may be made on the basis of

identifying characteristics (such as sequence number and/or timestamps) that are

common throughout each of the data streams received from the content source. (Figure

4, Column 11 Lines 1-40, Column 12 Lines 40-55) Geagan discloses that by

comparing different offsets and correlating the offsets with an absolute reference clock,

the missing sequence of information may be rebuilt and inserted into the streaming

content at the appropriate time. The Examiner notes that since timestamps often

contain date and time data, the sequencing algorithm may therefore also use an

reference date instead of a reference clock.(Column 12 Lines 5-25) Geagan discloses

of sequencing packets from an absolute starting point, such that the system is able to

identify the interval between the updates in the data stream. (Column 13 Lines 1-10)

Geagan discloses of examining each stream (or some number thereof) and choosing

the desired packet from any stream that included it. (Column 13 Lines 55-65) The

Examiner notes that the sequencing process, the examination process, and seaming

process described by Geagan must inherently calculate an offset value, in either time,

date, or other alphanumerical formats, in order to work as described. Geagan

discloses of maintaining a record of the information already transmitted, and being able

to recall where the information was interrupted, and providing the information that was

lost during the interruption. (Column 9 Lines 45-65, Column 10 Lines 20-55)

Eyal , Terek and Geagan are analogous art because they present concepts and

practices regarding presentation of a sequence of references to information, in the

context of providing streaming audio source and playback of said streaming audio. It is

respectfully suggested that at the time of the invention it would have been obvious to a

person of ordinary skill in the art to combine the teachings of Geagan regarding 1) use

of timestamps as unique identifiers and 2) use of offsets for locating and searching for

indexed and uniquely identified objects, into the combined methods of Eyal and Terek .

By the combination of Eyal , Terek , and Geagan the user can control when the last

said predetermined number of seconds of information can be repeated to aid in recalling

where the information was interrupted.

The suggested motivation for doing so would have been, as Geagan suggests,

would be to facilitate playback for the streaming content in case of transmission errors

or playback error. (See Geagan Column 12 Lines 55-60) Terek also suggests that by

performing the search for missing information based on a hash value instead of the

entire original value, the search is made more efficient. (See Terek Column 2 Lines

50-55)

Therefore it would have been obvious to combine the teachings of Geagan into

the combined methods of Eyal and Terek in order to arrive at the invention described

in Claims 4, 8-11, 14, 16.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Please refer to the enclosed PTO-892 form.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Greg Bengzon whose telephone number is (571) 272-

3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William Cuchlinski can be reached on (571)272-3925. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gcb

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